

New York State Department of Environmental Conservation

Waterbody Inventory and Priority Waterbodies List (WI/PWL)

General Description

A Statewide Inventory (Database) of specific waterbodies in New York State that characterizes general water quality, the degree to which water uses are supported, and progress toward the identification of quality problems, sources and improvements.

Purpose

In order to fulfill certain requirements of the Federal Clean Water Act, the New York State Department of Environmental Conservation (NYSDEC) must provide regular, periodic assessments of the quality of the water resources in the state, and their ability to support specific uses. These assessments reflect monitoring and water quality information drawn from a number of programs and sources, both within and outside NYSDEC. This information has been compiled by NYSDEC Division of Water and merged into an inventory database of all waterbodies in New York State. The database is used to record current water quality information, characterize known and/or suspected water quality problems and issues, and track progress toward their resolution. This inventory of water quality information is the division's Waterbody Inventory/Priority Waterbodies List.

In addition to providing a baseline assessment of water quality, the Waterbody Inventory/Priority Waterbodies List supports program management within the Division of Water in other ways. For example:

Provide Baseline Assessments of water quality. Periodic rotating basin assessments evaluate whether the waters of the state support their designated uses. Such assessments are both general (cumulative statewide evaluation of all waters) and specific (evaluation of individual waterbodies) in nature. Results of these assessments are published in the New York State Water Quality (305b) Report.

Focus Division Program Activities (compliance, monitoring, grant funding, EPBS, etc) on addressing those specific water quality issues--both statewide problems (e.g., stormwater, toxic/contaminated sediment) and site/waterbody-specific concerns--where efforts will have the greatest impact.

Maintain a Consistent and Objective Inventory/Evaluation of water quality problems/issues suitable for use in the development of program-specific priority ranking/scoring systems/efforts.

Record the Water Quality History and information for specific waterbodies so that the division can easily respond to questions from both inside and outside the division (including the public) concerning what is known about the water quality of specific rivers, lakes, watersheds.

Monitor Progress of Division Efforts/Programs toward improving the water resources of the state.

Supplemental Information

Comprehensive Assessment Strategy

The Waterbody Inventory/Priority Waterbodies List is a key component of the Division of Water's larger *Comprehensive Assessment Strategy*. This strategy is designed to integrate a variety of division activities into a more coordinated and comprehensive water quality program. The specific goals of the *Comprehensive Assessment Strategy* are to provide a: thorough

(appropriate to available resources) monitoring of state waters; complete evaluation and consideration of all available monitoring data; comprehensive assessment of the quality of all waters in the state; and coordinated approach to improving and protecting these water resources. Implementation of the *Comprehensive Assessment Strategy* relies on a rotating drainage basin approach. This approach focuses water quality monitoring and assessment activities on a portion of the state for a designated period of time, and then turns attention to other parts of the state. New York State's use of the rotating basin approach enables the updating of the WI/PWL in two or three of its seventeen drainage basins (about 20% of the state) each year. This schedule allows for a comprehensive reassessment of the water quality throughout the entire state over a five-year cycle.

Statewide Waters Monitoring Program

Prior to the updating of the WI/PWL, the division conducts a two-year monitoring effort in the targeted drainage basins. These basin studies – conducted within the Division of Water's Statewide Waters Monitoring Program – involve a variety of sampling activities conducted by the division, other NYSDEC programs, and water quality partners outside NYSDEC.

The first year of these basin studies focuses on the review of existing water quality information and the incorporation of monitoring efforts being conducted by other basin/watershed partners. Division monitoring activities in the first year are generally limited to *biological screening*. Biological screening relies on the use of resident biological communities as indicators of water quality. The primary biological communities are fish, macroinvertebrates (aquatic insects) and algae. Of these, macroinvertebrates have proven the most appropriate for screening water quality at a large number of sites in a reasonable amount of time. The second year of the basin studies involves more intensive chemical and biological monitoring. This includes water chemistry sampling at selected sites, sediment chemistry/toxicity sampling, multiple site surveys along specific river reaches, and other site- or problem-specific monitoring investigations.

Water Quality Assessments: Updating the WI/PWL

At the conclusion of the monitoring effort in a basin, the water quality data are evaluated to assess the ability of the waterbodies to support specific water uses (water supply, public bathing, aquatic life, secondary recreation, etc). As was the case with the monitoring effort, the evaluation and assessment of data and subsequent updating of WI/PWL information incorporates input from division/department staff and outside partners as well. WI/PWL assessment workshops are conducted for NYSDEC regional staff and watershed partners within each targeted basin, and participants are encouraged to submit assessment worksheets for waterbodies for which they have information. This information – along with Statewide Waters Monitoring Program assessment information – is compiled and distributed to participants for review and comment before the Final WI/PWL Assessment Report is issued.

An Expanded Waterbody Inventory

Upon its inception in 1983 and through the mid-1990s, the Priority Waterbodies List was limited to recording information for only those waters with known or suspected water quality problems. The expansion of the database to include *all* waters in the state, including those with good and unknown water quality, is a fairly recent effort. However, while this expanded waterbodies database provides more complete water quality information, for program management purposes the division must also be able to cull a subset of “*priority*” waterbodies from the inventory of all

waters on which the division should spend resources. In other words, there is a need for both a comprehensive *Waterbody Inventory* of water quality information for all waters in the state and a subset of this inventory that is limited to segments with well documented, potentially resolvable, higher priority problems and issues. This subset of the Waterbody Inventory is the *Priority Waterbodies List*.